# Report Number 104

# RHODE ISLAND Drought Management Plan

State Guide Plan Element 724

June 2002

# **Water Resources Board**

# STATEWIDE PLANNING PROGRAM

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#### **ABSTRACT**

TITLE: Rhode Island Drought Management Plan SUBJECT: Statewide drought management and response

DATE: June 2002

AGENCIES: Rhode Island Water Resources Board &

Rhode Island Statewide Planning Program

SOURCE OF Rhode Island Statewide Planning Program, One Capitol Hill,

COPIES: Providence, RI 02908, (401) 222-7901

www.planning.state.ri.us

SERIES NO.: Report Number 104, State Guide Plan Element 724

**NUMBER OF** 56, plus executive summary and appendices

ABSTRACT:

PAGES:

This plan establishes coordinated procedures for the State of Rhode Island's response to severe drought episodes. It outlines the responsibilities of state, federal and local entities involved in water resources management, and defines the roles these key entities are to play in the state's response to a long-term drought. Duties related to data gathering, anticipation of drought conditions, and mitigation of the effects of drought are described. Policies and recommendations are established to anticipate drought conditions, respond early and coordinate resources to effectively manage the state's water

resources during a drought.

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#### **PREFACE**

This plan was developed to provide the State of Rhode Island with a policy guide and framework for coordinated responses in times of drought. The 1993 Rhode Island State Guide Plan Element #723, *The Rhode Island Water Emergency Response Plan*, recommended that the state develop a separate drought plan. In addition, during a short drought experienced in the spring and summer of 1999, the need for such a plan was reinforced. During that time, some areas of the state experienced cumulative deficits in rainfall that were 8-12 inches below normal over a 12-month period. Stream flows across much of the state were 75% of their historical flows according to the United States Geological Survey (USGS) Rhode Island Office. Several streams set record low stream flow levels during 1999, and the ground water levels measured then were also well below normal.

As a result in 1999, the RI Water Resources Board convened a Long-term Drought Management Task Force (the Task Force) to develop a Drought Management Plan for the state. Mr. M. Paul Sams, General Manager of the Water Resources Board, served as chairman. Statewide Planning Program staff participated as a Task Force member, advised the Task Force on existing water resource-related policies of the State Guide Plan, and provided other assistance as requested. The Task Force developed Interim Drought Guidelines, which were approved by the Governor in August 2000 to remain in effect until *The Drought Management Plan* was completed and adopted.

During its two year study process, the Task Force worked closely with the National Weather Service and the US Geological Survey to coordinate drought levels and indices with those used by neighboring states and by the Drought Watch/Warning Program of the National Weather Service. The Task Force reviewed historical precipitation trends and data available from the 1999 drought. The Taunton Office of the National Weather Service also analyzed meteorological data to identify past trends to be used as a basis for predicting future drought events. The Task Force's process in developing the plan was consensus-based, and Ms. Ann Morrissey of the University of R.I., Office of Professional Development, Leadership and Organizational Training, facilitated its deliberations. The individuals who served on the Task Force are listed on page vi of this plan. Staff support to the Task Force, including the initial drafting of the plan, was provided by Ms. Galen McGovern, Supervising Planner, Water Resources Board (resigned, 2001); and Ms. Kathleen Crawley, Supervising Planner, Water Resources Board.

The plan is organized into five parts. Part one provides the introduction and purpose of the plan. Part two contains background on drought in Rhode Island. Part three establishes policies for drought management, goals, objectives, and recommendations and strategies for ongoing drought planning. Part four, the heart of the plan, presents a strategic response plan to drought. Part five, the conclusion, emphasizes the need for continuing pro-active implementation of State Guide Policies to reduce vulnerability to drought. The Executive Summary includes a listing of key actions to be taken by various agencies and entities at different drought stages.

#### **ADOPTION**

In recognition of the worsening drought conditions during late 2001 and early 2002, the State Planning Council adopted this plan as an element of the State Guide Plan on March 14, 2002 in accordance with its Rule 13: Emergency Procedures. Following a public hearing held on May 2, 2002, and revision of the plan to reflect input and comments received, the Council re-affirmed its adoption of the plan on June 13, 2002. Finalization of the plan for adoption as a State Guide Plan element was performed by Ms. Nancy Hess, Principal Environmental Planner, of the Statewide Planning Program, working under the supervision of Ms. Blanche Higgins, Supervising Planner, Mr. George Johnson, Assistant Chief, and Mr. John O'Brien, Chief.

#### **ACKNOWLEDGEMENTS**

The Drought Management Plan represents a sum of efforts contributed by numerous individuals and groups. In addition to the Long-term Drought Management Task Force Members listed on page vi and the staff of the two agencies previously mentioned, the following individuals contributed to production of this plan:

- Mr. Charles Banks, GIS Technician, Water Resources Board
- Ms. Grace Beiser, Supervising Planner, Statewide Planning Program (retired 2001)
- Ms. Kim A. Gelfuso, Information Services Technician II, Statewide Planning Program
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- Mr. Kevin Nelson, Principal Planner, Statewide Planning Program
- Ms. Maia Peck, Principal Environmental Planner, Statewide Planning Program (resigned 2000)

Cover photo courtesy of the Water Resources Board